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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/105,844	06/26/1998	USHA UPADHYAYULA	INTL-0055(P5	6060

7590 10/06/2003

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EXAMINER	
ALAUBAIDI, HAYTHIM J	
ART UNIT	**PAPER NUMBER**
2171	22

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/105,844	UPADHYAYULA ET AL.	
	Examiner	Art Unit	
	Haythim J. Alaubaidi	2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *43-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *43-60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 June 1998* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This communication is in response to the (RCE) Request for Continue Examination filed on September 10, 2003.

2. Claims 1-42 are canceled by the Applicant.

3. New Claims 43-60 are currently presented for examination following the amendment (RCE).

4. Claims 43, 50 and 57 the independent claims.

5. Claims 43-60, are rejected under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 43-60, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirowo Inoue (U.S. Patent No. 6,273,535 and Inoue hereinafter) in view of Kimitaka Murashita (U.S. Patent No. 6,504,950 and Murashita hereinafter).

Regarding Claims 43, 49, 50 and 56-58, Inoue discloses:

capturing an image in a digital imaging device[1] (Figure 1; see also Col 3, Lines 67 though Col 4, Line 1)

associating graphical object containing image data with said device profile [2] (Col 4, Lines 6-11), i.e.

> The digital camera 1 ***stores*** (associate)[3] ***input-device-unique information unique to the device*** (device profile) in a status memory 4. Also, the digital camera 1 hotoelectrically converts an image into an electrical signal using a CCD and the like, ***and holds a plurality of images as digital image data in an image memory 5*** (image data).

see also (Col 4, Lines 11-19), i.e.

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[1] Murashita also disclose digital input/output devices, please see **(Col 1, lines 35-36)**, i.e. image input devices such as scanners.

See also (Col 1, Lines 49-54), i.e. A color management system (hereinafter sometimes referred to as the CMS) is a technique for matching color appearance between different input/output devices such as displays, scanners, color printers, etc. Using the CMS, it becomes possible to match color appearance between an image read by a scanner and an image displayed on a display and also between such an image and an image output by a color printer.

See also (Col 16, Lines 43-44), i.e. and presents the pattern image and grayscale image simultaneously for display on the screen of the display device 14.

[2] Please note that the Examiner would also like to direct the Applicant's attention to citations in Murashita that could be useful.
(Col 17, Lines 1-8), i.e.
As shown in FIG. 3, the pattern image 40 expressed by the pattern image data stored in the pattern image data holding unit 30 and the grayscale image 42 expressed by the grayscale image data stored in the grayscale image data holding unit 32 are presented via the display control unit 31 for display, separately, in different regions but simultaneously on the same screen of the display device 14 in the computer 10 (profile creation apparatus 21).
See also (Col 29, Lines 33-36), i.e.
In the profile creation apparatuses 21, 22, and 23, the data are stored in the pattern image data holding unit 30.

> At the same time, the digital camera 1 ***stores the input states of the individual images*** (image data) held in the image memory 5 and ***parameters of color processing*** (device profile)[4] and the like executed in the digital camera in an image additional information memory 6 as image additional information 11. Such information is stored in a RAM or a nonvolatile RAM, or a magnetic storage medium or magnetooptical recording medium.

Inoue reference discloses all of the claimed subject matter set forth above, except it does not explicitly indicate the step of developing a device profile based at least on the conditions of image capture; and the step of transferring said graphical object and associated device profile from said imaging device. However Murashita teaches developing a device profile based at least on the conditions of image capture (Col 16, Lines 45-49), i.e.

> The profile creation apparatus 21 further includes the selection unit 16 (18) which, in accordance with user selection, selects a grayscale image patch of the brightness closest to the brightness of the pattern image displayed on the display device 14

(Col 35, Lines 54-63), i.e.

> Further, according to the present invention, a pattern image consisting of a plurality of colors and a grayscale image consisting of a single color are displayed on a display device and, based on the displayed images, the input/output characteristic of the display is obtained, and the profile of the display is created based on the thus obtained input/output characteristic. This achieves the effect that the profile

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[3] The Examiner is interpreting the "stores" feature in the Inoue reference as "associating" according to the Specification of the current Application (please see Disclosure, Page 4, Line 28).

[4] The Examiner would like to note that the "parameters of color processing" can also be interpreted to be like the device profile, considering Applicant's Specification of the current Application (please see Page 1, Lines 13-16).

> relating to the color appearance of the display device can be created by the user without using a specialized measuring instrument.

Murashita also teaches transferring said graphical object and associated device profile from said imaging device (Col 32, Lines 41-45; see also Lines19-21), i.e.

> In a system using the Internet, electronic mail (E-mail) is used as a method of sending the ICC profile Ip to the client 106 at the user 116. In this case, the functions of two servers, an http server for the WWW and a mail server (hereinafter called the SMTP server) for transferring mail, must be incorporated in the server 102. Of course, the http server and the SMTP server may be configured as different servers between which data are transferred.

Given the intended broad application of Inoue system, it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Inoue with the teachings of Murashita to include developing a device profile based at least on the conditions of image capture and transferring said graphical object and associated device profile from said imaging device. As in developing the device profile, Inoue reference suggest in a way, the consideration of "image condition" (Abstract, see also Col 5,Lines18-20, i.e. ***color processing parameter 13-15 in the camera, as image sensing conditions***) yet the developing of a device profile was not based the condition of the image capture, but instead was based on forming images (Col 20, Lines 43-45), hence one ordinary skill in the art would be motivated to combine the references in order to increase the flexibility of a device usage by increasing the compatibility of the device with other systems, such as other output devices.

Regarding Claims 44, 51 and 59, Murashita discloses:

storing portion of the associated profile information in a profile file (Figures 51 and 52; see also Col 2, Lines 18-23), i.e. [5]

> As shown in FIGS. 51 and 52, the ICC profile Ip consists of a fixed length 128-byte profile header Ph containing information on the profile itself and information on the target device (input/output device), a variable length tag table Tt indicating what information is stored where, and tag element data Ted of variable length containing actual information.

associating a file name with the profile (Col 2, Lines 43-44), i.e.

> The tag element data Ted having the size of 74h is also a Profile Description Tag PDT and contains information (name, etc.) unique to the profile.

communicating the filename to the CMS (Col 30, Lines 32-43), i.e. CMS, see also transmitting unit.

Regarding Claims 45, 52 and 60, Murashita discloses storing a value representative of a color relation between an input color space and a profile color space (Col 10, Lines 1-7), i.e.

> In this case, by calculating a plurality of input value versus output value relations based, for example, on the obtained gamma coefficient value, and by creating the profile of the display device by including therein the thus calculated input value versus output value relations, profiles applicable to almost all kinds of display devices can be created.

(Col 26, Lines 60-64), i.e.

> Since the ICC profile Ip is capable of storing the relations between the input and output values of the gamma characteristic.

(Col 27, Lines 5-9), i.e.

> After completing the measurement for the input values E(x) corresponding to the output values B(y) of the predetermined four points, the relations between the input and output values (see FIG. 27) are stored in the ICC profile Ip.

Regarding Claims 46-47 and 53-54, Murashita discloses illuminant tag value and white point tag value (Col 2, Lines 45-56), i.e.

> The tag element data Ted specified by the next 12-byte tag labeled mediaWhitePointTag (also referred to as wtptTag) wtpt contains CIEXYZ values of white (w). The tag element data Ted specified by the next 12-byte tag labeled redColorantTag (also referred to as rXYZTag) rXYZ contains normalized CIEXYZ values of red (r). The last 12-byte tag labeled redTRCTag (also referred to as rTRCTag) rTRC stores input/output characteristic values of red (r); in the example of FIG. 52, values of 16 points are stored in the last 32 bytes (two bytes for each point). In the CCC profile Ip, the stored CIEXYZ values are normalized with respect to the standard illuminant of D50.

Regarding Claims 48 and 55, Murashita discloses red, green and blue colorant tag values (Figure NO. 54).

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[5] Please not that the Examiner is referencing the "Profile Header" as part of the profile information

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Points of Contact

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haythim J. Alaubaidi whose telephone number is (703) 305-1950. The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any response to this office action should be mailed to:

The Commissioner of Patents and Trademarks, Washington, D.C. 20231 or telefax at our fax number (703) 872-9306.

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, 6th Floor Receptionist, Arlington, Virginia. 22202.

Haythim J. Alaubaidi

Patent Examiner
Technology Center 2100
September 26, 2003

SAFET METJAHIC
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

according to the Specification of the current Application, please refer to the Application disclosure, Page 5, Lines 1-7.